

## EXCITER-EXCITATION SYSTEM AND METHODS FOR COMMUNICATIONS

ABSTRACT

An exciter system (1, 2) able to communicate information between an exciter unit (10) and one or more remote units (12) or between multiple exciter units (10). The exciter units (10) may include wireless type exciter devices, such as optimum exciters (14), or they may include wired equivalent type exciter devices, such as direct connect exciters (16). The exciter devices (14, 16) inject or extract RF currents (24) in the metallic framework (22) of a vehicle. The remote units (12) couple electromagnetic fields (26) with the metallic framework (22) of the vehicle. The information is exchanged with the exciter devices (14, 16) by communications equipment (20) that modulates or demodulates the RF currents (24) and/or electromagnetic fields (26) with the information. As the RF currents (24) and/or electromagnetic fields (26) reach everywhere within, on and in close proximity to the vehicle the information is communicated throughout.